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| cga | gta | tta | aag | gtc | ttt | cat | tat | ttt | gaa | agc | aat | agt | gag | cca | acc | 382 |
| Arg 35 | Val | Leu | Lys | Val | Phe 40 | His | Tyr | Phe | Glu | Ser 45 | Asn | Ser | Glu | Pro ' | Thr 50 | |
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| Thr | Trp | Ala | Ser | Ile 55 | Ile | Arg | His | Gly | Asp 60 | Ala | Thr | qaA | Val | Arg 65 | Gly | |
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| Ile | Ile | Gln | Lys 70 | Ile | Val | Asp | Ser | His 75 | Lys | Val | Lys | His | Val 80 | Ala | Cys | |
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| Lys | Gly | Phe | Leu | Asn 135 | Gln | Phe | Thr | Glu | Asp 140 | Lys | Pro | Thr | Leu | Asn 145 | Phe | |
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| Phe | Tyr | Gln | Gln 150 | Val | Lys | Ser | Asp | Tyr 155 | Met | Leu | Glu | Ile | Ala 160 | Asp | Gln | |
| gtg | gac | cag | gaa | a att | gct | ttg | gaag | g ttg | 99 | t tg | t ct | a ga | a at | a cg | g cga | 766 |
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| Glu 195 | | Leu | ı Glu | ı Lys | Asp 200 | Val | . Gly | Leu | Lys | Arg 205 | Phe | Phe | Pro | Lys | Ser 210 | |
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| | Cys 260 | Ala | Leu | Gly | Ser | Ser 265 | Trp | Ile | Ile | Ser | Val 270 | Glu | Leu | Ala | 11 | Le | |
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| Ser 355 | Gln | Ser | Phe | Ile | Ile 360 | Arg | Pro | Gln | Lys | Glu 365 | Gly | Glu | Arg | Ala | . L | eu 70 | |
| cca | tca | ata | cca | aag | ttg | gcc | aac | ago | gaa | a aaq | g ca | a gg | c at | g c | 39 | aca | 1390 |
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| His | Ala | Val | Ser 390 | Val | Ser | Glu | Thr | Asp 395 | Asp | Tyr | Ala | Glu | 11e 400 | Ile | A | ga | |
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| Glu | Glu | Asp 405 | | Tyr | Thr | Met | Pro 410 | Ser | Thr | Arg | Asp | Tyr 415 | Glu | Ile | e G | ln | |
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| Val | Ala | Ile | Lys | Thr 455 | Cys | Lys | Asn | Cys | Thr 460 | Ser | Asp | ser | Val | Arg 465 | Glu | |
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| Lys | Phe | Leu | Gln 470 | Glu | Ala | Leu | Thr | Met 475 | Arg | Gln | Phe | | His 480 | Pro | His | |
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| Ile | Val | Lys 485 | Leu | Ile | Gly | Val | Ile 490 | Thr | Glu | Asn | Pro | Val 495 | Trp | Ile | Ile | |
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| Met | Glu 500 | Leu | Cys | Thr | Leu | Gly 505 | Glu | Leu | Arg | Ser | Phe 510 | Leu | Gln | Val | Arg | |
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| Lys 515 | Tyr | Ser | Leu | Asp | Leu 520 | Ala | Ser | Leu | Ile | Leu 525 | Tyr | Ala | Tyr | Gln | Leu 530 | |
| agt | aca | gct | ctt | gca | tat | cta | gag | ago | aaa | aga | ttt | gta | cac | ag | g gac | 1870 |
| Ser | Thr | Ala | Leu | Ala 535 | Tyr | Leu | Glu | Ser | Lys 540 | Arg | Phe | Val | His | Arg 545 | Asp | |
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| Ile | Ala | Ala | Arg 550 | Asn | Val | Leu | Val | Ser 555 | Ser | Asn | Asp | Cys | Val 560 | Lys | Leu | |
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| Gly | Asp | Phe 565 | Gly | Leu | Ser | Arg | Tyr 570 | Met | Glu | Asp | Ser | Thr | Tyr | Tyr | Lys | |
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| Cys | Met | Trp | Glu | Ile 615 | Leu | Met | His | Gly | Val 620 | Lys | Pro | Phe | Gln | Gly 625 | Val | |
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| Lys | Asn | Asn | Asp 630 | Val | Ile | Gly | Arg | Ile 635 | Glu | Asn | Gly | Glu | Arg 640 | Leu | Pro | |

1.818.0

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| Thr | Asn 740 | His | Tyr | Gln | Val | Ser 745 | Gly | Tyr | Pro | Gly | Ser 750 | His | Gly | Ile | Th | £ | |
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| Thr | Asp | Ser | Trp | Asn 775 | His | Arg | Pro | Gln | Glu 780 | Ile | Ala | Met | Trp | G1n 785 | Pro | 0 | |
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| Asn | Val | Glu | Asp 790 | Ser | Thr | Val | Leu | Asp 795 | Leu | Arg | Gly | Ile | Gly 800 | Gln | ۷a: | 1 | |
| ttg | cca | acc | cat | ctg | atg | gaa | gag | cgt | cta | ato | c cg | a cag | g ca | a ca | ag g | aa | 2686 |
| Leu | Pro | Thr 805 | His | Leu | Met | Glu | Glu 810 | Arg | Leu | Ile | Arg | Gln 815 | Gln | Gln | Gl | 1 | |
| atg | gaa | gaa | gat | cag | cgc | tgg | ctg | gaa | aaa | gag | g ga | a aga | a tt | t ct | g a | aa | 2734 |
| Met | Glu 820 | Glu | Asp | Gln | Arg | Trp 825 | Leu | Glu | Lys | Glu | Glu 830 | Arg | Phe | Leu | Ly | 3 | |
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| Gly | His | Leu 885 | Gly | Ser | Leu | Ala | Ser 890 | Leu | Ser | Ser | Pro | Ala 895 | Asp | Ser | Ty: | r | |
| aac | gag | ggt | gtc | aag | ctt | cag | ccc | cag | gaa | ato | ago | ccc | e cct | cc | t a | ct | 2974 |
| Asn | Glu 900 | Gly | Val | Lys | Leu | Gln 905 | Pro | Gln | Glu | Ile | Ser 910 | Pro | Pro | Pro | Th | r | |
| gcc | aac | ctg | gac | cgg | tcg | aat | gat | aag | gtg | tac | gag | aat | gt | gac | g g | lac | 3022 |
| Ala 915 | Asn | Leu | Asp | Arg | Ser 920 | Asn | Asp | Lys | Val | Tyr 925 | Glu | Asn | Val | Thr | G1: 93 | У 0 | |
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| Leu | Val | Lys | Ala | Val 935 | Ile | Glu | Met | Ser | Ser 940 | Lys | Ile | Gln | Pro | Ala 945 | Pr | 0 | |
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| Thr | Leu | Leu 965 | Ala | Thr | Val | Asp | Glu 970 | Thr | Ile | Pro | Leu | Leu 975 | Pro | Ala | Se | r | |
| acc | cac | cga | gag | att | gag | atg | gca | cag | aag | cta | a ttg | g aa | e te | t ga | c | etg | 3214 |
| Thr | His 980 | Arg | Glu | Ile | Glu | Met 985 | Ala | Gln | Lys | Leu | Leu 990 | Asn | Ser | Asp | Le | u | |
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| Leu | Lys | Met 1045 | Leu | Gly | Gln | | Arg L050 | Pro | His | | | | | | | | |

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540

535

| Arg 545 | Asp | Ile | Ala | Ala | Arg 550 | Asn | Val | Leu | Val | Ser 555 | Ser | Asn | Asp | Cys | Val 560 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------------|------------|------------|------------|------------|------------|
| Lys | Leu | Gly | Asp | Phe 565 | Gly | Leu | Ser | Arg | Tyr 570 | Met | Glu | Asp | ser | Thr 575 | Tyr |
| Tyr | Lys | Ala | Ser 580 | Lys | Gly | Lys | Leu | Pro 585 | Ile | Lys | Trp | Met | Ala 590 | Pro | Glu |
| Ser | Ile | Asn 595 | Phe | Arg | Arg | Phe | Thr 600 | Ser | Ala | Ser | Asp | Val 605 | Trp | Met | Phe |
| Gly | Val 610 | Cys | Met | Trp | Glu | Ile 615 | Leu | Met | His | Gly | Val 620 | Lys | Pro | Phe | Gln |
| | Val | Lys | Asn | Asn | Asp | Val | Ile | Gly | Arg | Ile | Glu | Asn | Gly | Glu | Arg 640 |
| 625 Leu | Pro | Met | Pro | Pro 645 | 630 Asn | Cys | Pro | Pro | Thr 650 | 635 Leu | Tyr | Ser | Leu | Met 655 | |
| Lys | Cys | Trp | Ala 660 | Tyr | Asp | Pro | Ser | Arg 665 | Arg | Pro | Arg | Phe | Thr 670 | Glu | Leu |
| Lys | Ala | Gln 675 | Leu | Ser | Thr | Ile | Leu 680 | Glu | Glu | Glu | Lys | Ala 685 | Gln | Gln | Glu |
| Glu | Arg 690 | Met | Arg | Met | Glu | Ser 695 | Arg | Arg | Gln | Ala | Thr 700 | Val | Ser | Trp | Asp |
| Ser 705 | Gly | Gly | Ser | Asp | Glu 710 | Ala | Pro | Pro | Lys | Pro 7 1 5 | ser | Arg | Pro | Gly | Tyr 720 |
| Pro | Ser | Pro | Arg | Ser 725 | Ser | Glu | Gly | Phe | Tyr 730 | Pro | Ser | Pro | Gln | His 735 | Met |
| Val | Gln | Thr | Asn 740 | His | Tyr | Gln | Val | Ser 745 | Gly | Tyr | Pro | Gly | Ser 750 | His | Gly |
| Ile | Thr | Ala 755 | Met | Ala | Gly | Ser | Ile 760 | Tyr | Pro | Gly | Gln | Ala 765 | Ser | Leu | Leu |
| Asp | Gln 770 | Thr | Asp | Ser | Trp | Asn 775 | His | Arg | Pro | Gln | Glu 780 | Ile | Ala | Met | Trp |
| Gln 785 | Pro | Asn | Val | Glu | Asp 790 | Ser | Thr | Val | Leu | Asp 795 | Leu | Arg | Gly | Ile | Gly 800 |
| Gln | Val | Leu | Pro | Thr 805 | His | Leu | Met | Glu | Glu 810 | Arg | Leu | Ile | Arg | Gln 815 | Gln |
| Gln | Glu | Met | Glu 820 | Glu | Asp | Gln | Arg | Trp 825 | Leu | Glu | Lys | Glu | Glu 830 | Arg | Phe |
| Leu | Lys | Pro 835 | Asp | Val | Arg | Leu | Ser 840 | Arg | Gly | Ser | Ile | Asp 845 | Arg | Glu | Asp |
| Gly | Ser 850 | | Gln | Gly | Pro | Ile 855 | Gly | Asn | Gln | His | 11e 860 | Tyr | Gln | Pro | Val |
| Gly 865 | Lys | Pro | Asp | Pro | Ala 870 | Ala | Pro | Pro | Lys | Lys 875 | Pro | Pro | Arg | Pro | Gly 880 |

Ala Pro Gly His Leu Gly Ser Leu Ala Ser Leu Ser Ser Pro Ala Asp 885

Ser Tyr Asn Glu Gly Val Lys Leu Gln Pro Gln Glu Ile Ser Pro Pro 905 Pro Thr Ala Asn Leu Asp Arg Ser Asn Asp Lys Val Tyr Glu Asn Val 920 Thr Gly Leu Val Lys Ala Val Ile Glu Met Ser Ser Lys Ile Gln Pro Ala Pro Pro Glu Glu Tyr Val Pro Met Val Lys Glu Val Gly Leu Ala Leu Arg Thr Leu Leu Ala Thr Val Asp Glu Thr Ile Pro Leu Leu Pro 965 Ala Ser Thr His Arg Glu Ile Glu Met Ala Gln Lys Leu Leu Asn Ser 985 Asp Leu Gly Glu Leu Ile Asn Lys Met Lys Leu Ala Gln Gln Tyr Val 1000 Met Thr Ser Leu Gln Gln Glu Tyr Lys Lys Gln Met Leu Thr Ala Ala His Ala Leu Ala Val Asp Ala Lys Asn Leu Leu Asp Val Ile Asp Gln 1035 Ala Arg Leu Lys Met Leu Gly Gln Thr Arg Pro His <210> 3 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> antisense sequence <400> 3 20 ccqcqqqctc acaqtqqtcg <210> 4 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> antisense sequence <400> 4 20 ggcgccgtga agcgaaggca <210> 5 <211> 20 <212> DNA <213> Artificial Sequence <220>

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15

20